

CLAIMS

1. A circularly polarizing plate, comprising:

a complex type scattering-dichroic absorbing polarizer

5 **including a film that has a structure having a minute domain dispersed in a matrix formed of an optically-transparent water-soluble resin including an iodine based light absorbing material; and**

a quarter wavelength plate formed with one or more

10 **retardation plates.**

2. The circularly polarizing plate according to Claim 1,

wherein the minute domain of the complex type absorbing

polarizer is formed of an oriented birefringent material.

3. The circularly polarizing plate according to Claim 2,

15 **wherein the birefringent material shows liquid crystalline at least in orientation processing step.**

4. The circularly polarizing plate according to Claim 2,

wherein the minute domain of the complex type absorbing

polarizer has 0.02 or more of birefringence.

5. The circularly polarizing plate according to Claim 2,

wherein in a refractive index difference between the birefringent

material forming the minute domain and the

optically-transparent water-soluble resin of the complex type

absorbing polarizer in each optical axis direction,

25 a refractive index difference (Δn^1) in direction of axis

showing a maximum is 0.03 or more, and

a refractive index difference (Δn^2) between the Δn^1 direction and a direction of axes of two directions perpendicular to the Δn^1 direction is 50% or less of the Δn^1 .

5 6. The circularly polarizing plate according to Claim 5,
wherein an absorption axis of the iodine based light absorbing
material of the complex type absorbing polarizer is oriented in the
 Δn^1 direction.

10 7. The circularly polarizing plate according to Claim 1,
wherein the film used as the complex type absorbing polarizer is
manufactured by stretching.

15 8. The circularly polarizing plate according to Claim 5,
wherein the minute domain of the complex type absorbing
polarizer has a length of 0.05 to 500 μm in the Δn^2 direction.

9. The circularly polarizing plate according to Claim 1,
wherein the retardation plate forming the quarter wavelength plate
is a stretched film of a transparent polymer film and/or a layer of
an aligned and solidified liquid-crystalline compound.

20 10. The circularly polarizing plate according to Claim 1,
wherein at least one of the retardation plates forming the quarter
wavelength plate satisfies the formula: $0 < (nx - nz) / (nx - ny) < 1$, where
nx is a maximum in-plane refractive index, ny is a refractive index
in a direction perpendicular to the direction in which the
maximum in-plane refractive index is provided, and nz is a
refractive index in the thickness direction.

11. The circularly polarizing plate according to Claim 1,
wherein the retardation plate forming the quarter wavelength plate
has reverse dispersion properties and satisfies the formula:

1.2<(nx-nz)/(nx-ny)<2.0, where nx is a maximum in-plane refractive
5 index, ny is a refractive index in a direction perpendicular to the
direction in which the maximum in-plane refractive index is
provided, and nz is a refractive index in the thickness direction.

12. The circularly polarizing plate according to Claim 1,
wherein the complex type absorbing polarizer and the quarter
10 wavelength plate are laminated and fixed with a transparent acrylic
pressure-sensitive adhesive.

13. The circularly polarizing plate according to Claim 1,
wherein a transmittance to a linearly polarized light in a
transmission direction is 80% or more,

15 a haze value is 5% or less , and

a haze value to a linearly polarized light in an absorption
direction is 30% or more, with regard to the complex type
absorbing polarizer.

14. An optical film comprising at least one of the
20 circularly polarizing plate according to Claim 1.

15. An image display comprising the circularly polarizing
plate according to Claim 1 or the optical film according to Claim
14.